

ABSTRACT OF THE DISCLOSURE

A method and apparatus of measuring a predetermined parameter having a known relation to the transit time of movement of an energy wave through a medium, by transmitting from a first location in the medium a cyclically-repeating energy wave; receiving the cyclically-repeating energy wave at a second location in the medium; detecting a predetermined fiducial point in the cyclically-repeating energy wave received at the second location; continuously changing the frequency of transmission of the cyclically-repeating energy wave from the first location to the second location in accordance with the detected fiducial point of each received cyclically-repeating energy wave received at the second location such that the number of waves received at the second location from the first location is a whole integer; and utilizing the change in frequency to produce a measurement of the predetermined parameter.